Understanding the BEP

House Education Committee

February 15, 2011

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Overview

◆ 1992 - General Assembly passed the Education Improvement Act, which increased funding for K-12 education and created the Basic Education Program (BEP) as a means of allocating funding to school districts

◆ BEP formula consists of 45 cost components organized across three main categories

◆ BEP formula is complex and relies on many inputs derived from numerous sources

Major Changes: BEP 2.0 (2007)

- Increased state percentage share of funding
- Cost differential factor eliminated from formula
- Required 100% funding for at-risk students in K-12
- Student per teacher ratio adjusted in some categories
- Fiscal capacity index changed

Categories and Components

- ◆ **Three Main Categories**
  - ■ Instructional (70% state share)
  - ■ Classroom (75% state share)
  - ■ Non-classroom (50% state share)

BEP Components by Category

Instructional	Classroom	Non-classroom
Regular Education	K-12 At-risk Class Size Reduction	Superintendent
Vocational Education	Duty-free Lunch	System Secretarial Support
Special Education	Textbooks	Technology Coordinators
Elementary Guidance	Classroom Materials and Supplies	School Secretaries
Secondary Guidance	Instructional Equipment	Maintenance and Operations
Elementary Art	Classroom Related Travel	Custodians
Elementary Music	Vocational Center Transportation	Non-instructional Equipment
Elementary Physical Education	Technology	Pupil Transportation
Elementary Librarians (K-8)	Nurses	Staff Benefits and Insurance
Secondary Librarians (9-12)	Instructional Assistants	Capital Outlay
ELL Instructors	Special Education Assistants	
ELL Translators	Library Assistants	
Principals	Staff Benefits and Insurance	
Assistant Principals Elementary	Substitute Teachers	
Assistant Principals Secondary	Alternative schools	
System-wide Instructional Supervisors	Exit Exams	
Special Education Supervisors		
Vocational Education Supervisors		
Special Education Assessment Personnel		
Social Workers		
Psychologists		
Staff Benefits and Insurance		

Average Daily Membership

- ◆ What is ADM?
  - ■ Defined by T.C.A. as the "sum of total number of days enrolled divided by the number of days school is in session during this period"
- ◆ Why is ADM important?
  - ■ Main driver for BEP funding

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Cost Differential Factor (CDF)

◆ **What is CDF?**

- A cost of living adjustment used to adjust BEP funding in systems where the cost of living is greater than the statewide average

- Adjusts salary components only

- BEP 2.0 eliminated CDF adjustments

  ◆ BEP 2.0 has not been fully implemented; LEAs are receiving 50% of the total calculated CDF adjustment

◆ **Who receives CDF?**

- 16 systems received CDF adjustments in fiscal year 2010-11

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Fiscal Capacity Index

◆ What is fiscal capacity?

- A statistical estimate of a county's relative ability to raise revenue

◆ Why is fiscal capacity important?

- Primary equalization instrument in the BEP

◆ How is fiscal capacity calculated?

- Calculated using a 50/50 blend of two statistical models that consider different criteria (TACIR Model and CBER Model)

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Insurance

- ◆ **How is insurance calculated?**
  - ■ Calculated based on number of positions generated by the BEP formula for each position classification in the three categories
- ◆ **What is the state share of employee insurance?**
  - ■ State pays 45%, on average, of the total premium for all personnel in the instructional component, classroom component, and two classifications in the non-classroom component (superintendents and technology coordinators)
  - ■ State pays 30%, on average, of the total premium for system and school support staff located in the non-classroom component

Inflation Indices

◆ Unit costs are inflated each year based on the Consumer Price Deflator for government purchases as reported by CBER

◆ Inflation index includes compensation, non-compensation, and combined categories with each applied to the appropriate unit cost

Complexity of Calculations

Example: Predicting transportation costs

$$f_Y(y) = \int_{-\infty}^{\infty} \int_{-\infty}^{\infty} \dots \int_{-\infty}^{\infty} f_{X_1}(x_1) f_{X_2}(x_2) \dots f_{X_n}(x_n) \delta(y - G(x_1, x_2, \dots x_n)) \, dx_1 \, dx_2 \dots dx_n$$

Complexity of Calculations

Transportation funding is calculated using a three-year average of actual expenditures, inflationary adjustments, and a multiple linear regression formula that accounts for four other factors to predict costs.

Transportation Cost				Average Actual		Predicted
School System	ADT	Miles	ADM	SpEd ADT	Cost	Cost
Anderson County	5,620.3	2,818.0	7,762	14	2,492,943	2,509,154
Clinton City	0.0	0.0		0	1,202	-
Oak Ridge City	2,105.0	1,422.0	4,402	19	969,767	918,741
Bedford County	4,807.7	1,467.3	7,616	119	1,904,750	2,152,162
Benton County	1,879.4	854.0	2,462	29	879,076	808,958
Bledsoe County	1,654.7	884.3	1,874	37	836,597	690,902

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Questions?

Thank you.